IN THE CLAIMS:

1.   (Currently amended) A method of backup and restore procedure using a first storage subsystem and second storage subsystem which are connected to each other via a path, the first storage subsystem connected to a first host, the second storage subsystem connected to a second host, the method comprising the steps of:

performing a backup procedure comprising the steps of:

providing a first logical volume in the first storage subsystem and a second logical volume and a third logical volume in the second storage subsystem, the second logical volume being a copied logical volume of the first logical volume, the first and second logical volumes being in sync state, the third logical volume being a copied logical volume of the second logical volume, the second and third logical volumes being in sync state; and

splitting the second logical volume and the third logical volume ~~from the first host~~ by a command from the first storage subsystem; and

performing a restore procedure comprising the steps of:

mounting the third logical volume to the second host,

reading, at the second host, a file to be restored from the third volume,

writing, at the second host, the file to the second volume, and

re-synchronizing the first volume with the second volume.

2.   (Original) The method of claim 1, wherein

performing a restore procedure further comprises:

recovering a database onto the first volume, if a database application is being run on the first host.

3.   (Original) The method of claim 1, wherein

re-synchronizing the first volume with the second volume

further comprises:

determining from a pending data bitmap data on the second volume to be copied to the primary volume.

4.   (Original) The method of claim 1, further comprising

marking write data arriving after the command in a pending data bitmap,

thereby tracking which data has been modified.

5.   (Original) The method of claim 1, wherein

the command comprises identities of one or more files to be restored from the

third volume and written to the second volume, and wherein

reading, at the second host, a file to be restored from the third volume and

writing, at the second host, the file to the second volume,

further comprises:

reading exclusively the files specified in the command from the third volume and

writing the files so read to the second volume.

6.   (Previously presented) A method, comprising:

receiving an indication of files to be restored;

determining whether the files to be restored comprise contents of an entire

volume, and if so:

splitting remote mirrors existing between production volumes and backup

volumes;

resynchronizing local mirrors existing between the backup volumes and volumes

holding data copied from the backup volumes, at least one of the backup volumes and at least

one of the volumes holding data copied from the at least one backup volume being located in the

same storage subsystem; and

resynchronizing remote mirrors for the production volumes and the backup

volumes.

7.   (Original) The method of claim 6, wherein

resynchronizing local mirrors existing between the backup volumes and volumes

holding data copied from the backup volumes comprises:

comparing a pending bitmap for the backup volume with a pending bitmap for the

volume holding data copied from the backup volume to determine a set of differential data; and

copying the differential data from the volume holding data copied from the backup volume to the backup volume.

8.   (Original) The method of claim 6, wherein

resynchronizing remote mirrors for the production volumes and the backup volumes comprises:

comparing a pending bitmap for the production volume with a pending bitmap for the backup volume to determine a set of differential data; and

copying the differential data from the backup volume to the production volume.

9.   (Previously presented) An apparatus, comprising:

means for receiving an indication of files to be restored;

means for determining whether the files to restore comprise contents of an entire volume;

means for splitting remote mirrors existing between production volumes and backup volumes;

means for resynchronizing local mirrors existing between the backup volumes and volumes holding data copied from the backup volumes, at least one of the backup volumes and at least one of the volumes holding data copied from the at least one backup volume being located in the same storage subsystem; and

means for resynchronizing remote mirrors for the production volumes and the backup volumes.

10.   (Previously presented) A method of restoring a file to a first storage subsystem connected to a first host from a second storage subsystem connected to a second host, in accordance with a request from the first host, wherein:

the first storage subsystem and second storage subsystem are connected to each other via a path, the first storage subsystem stores a first logical volume, the second storage subsystem stores a second logical volume and a third logical volume, the second logical volume being a copied logical volume of the first logical volume, the third logical volume being a copied

logical volume of the second logical volume, the first logical volume and the second logical volume being in a non-sync state, the second and third logical volumes being in sync state,

the method comprising:

mounting the third logical volume to the second host,

reading, at the second host, a file to be restored from the third volume and ·

writing, at the second host, the file to the second volume, and

re-synchronizing the first volume with the second volume.

11. (Previously presented) The method of claim 10, wherein:

mounting the third logical volume to the second host comprises:

responsive to a command from the first storage subsystem, splitting the sync state between the second logical volume and the third logical volume.

12. (Previously presented) A storage subsystem, comprising:

a first logical volume,

a second logical volume, the first logical volume and the second logical volume being located in the same storage subsystem, and

an interface to a path providing connectivity to a primary storage subsystem,

the second logical volume being a copied logical volume of the first logical volume,

the first logical volume operative to be selectively placed into one of a sync state and a non-sync state with a logical volume in the primary storage subsystem,

the first logical volume and second logical volume being in sync state,

the second logical volume operative to permit host access to read files to be restored from the second logical volume and write the files to be restored to the first logical volume responsive to a restore command, and

the second storage subsystem operative to establish a sync state between the first logical volume and the second logical volume.

13. (Previously presented) A computer program product, comprising:

code for receiving an indication of files to be restored;

code for determining whether the files to be restored comprise contents of an entire volume, and if so invoking a plurality of codes, comprising:

code for splitting remote mirrors existing between production volumes and backup volumes;

code for resynchronizing local mirrors existing between the backup volumes and volumes holding data copied from the backup volumes, at least one of the backup volumes and at least one of the volumes holding data copied from the at least one backup volume being located in the same storage subsystem;

code for resynchronizing remote mirrors for the production volumes and the backup volumes; and

a computer readable storage medium that holds the codes.

14.   Canceled

15.   Canceled

16.   (Previously presented) An apparatus, comprising:

means for receiving a command;

means for splitting a sync state existing between a second storage means and a third storage means, the second storage means and the third storage means being located in the same storage subsystem;

means for making information on the third storage means available for reading;

means for reading a file to be restored from the third storage means;

means for writing the file to the second storage means; and

means for re-synchronizing the second storage means with a first storage means.

17.   (Original) The apparatus of claim 16, wherein

means for making information on the third storage means available for reading further comprises means for mounting the third storage means to a means for processing information stored by the third storage means.

18.   (Previously presented) A computer program product, comprising:

code for receiving a command;

code for splitting a sync state existing between a second storage unit and a third storage unit, the second storage unit and the third storage unit being located in the same storage subsystem;

code for making information on the third storage unit available for reading;

code for reading a file to be restored from the third storage unit;

code for writing the file to the second storage unit;

code for re-synchronizing the second storage unit with a first storage unit; and

a computer program product that holds the codes.

19.   (Original) A system, comprising:

a first storage subsystem connected to a first host,

a second storage subsystem connected to a second host, wherein:

the first storage subsystem and the second storage subsystem are connected to each other via a path, the first storage subsystem stores a first logical volume, the second storage subsystem stores a second logical volume and a third logical volume, the second logical volume being a copied logical volume of the first logical volume, the third logical volume being a copied logical volume of the second logical volume, the first logical volume and the second logical volume being in a non-sync state, the second and third logical volumes being in sync state, the second storage subsystem operative to mount the third logical volume to the second host responsive to a restore command, the host operative to read files to be restored from the third volume and write the files to be restored to the second volume, and the second storage subsystem operative to establish a sync state between the first logical volume and the second logical volume.

20.   Canceled.